

**Abstract**

A system for automatic personal editing of television programs based on viewer's information privately stored in viewer's computerized television receivers. The system, when activated, protects viewers, first of all children, filtering out everything that is unacceptable or useless. The filtering is carried out on three levels: blocking television programs, blocking some parts of the programs and replacing some parts by alternative video fragments. In particular, the system replaces a television commercial meaningless for a viewer by a commercial that may be of certain interest to the viewer. Another application is an improvement in management of controversial matter such as sex and violence. Depending on viewer's preferences the system replaces a certain scene by a commercial or restores such a scene if it has been replaced by a commercial in a program edited for broadcast television. The replacement technique uses basic channels for transmission of primary versions of television programs and auxiliary channels for transmission of alternative video fragments intended for replacement of some parts of the primary versions. A computerized receiver makes a decision on a replacement comparing viewer's information with information on the primary and alternative parts.